INTERNATIONAL PAPER PRODUCTS CORPORATION

Manufacturing Biomass Fuel and Recycling Materials

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International Paper Products Corporation (IPP) of Westfield, MA welcomes this opportunity to comment on the Massachusetts Department of Energy Resources (MADOER) Renewable Energy Portfolio Standard 225 CMR 14.00 (RPS) Notice of Inquiry (NOI) dated July 1, 2005.

IPP is in support of efforts which will result in changes or modifications to the current administration and application of the RPS. The following describes IPP's position on the matters at hand.

➢ Eligible Biomass Fuel - Definition

We urge the Massachusetts Department of Energy Resources (MADOER) to consider our fuel as meeting the definition of "eligible biomass fuel" as defined by 225 CMR 14.02. There are sound legal reasons for the MADOER to adopt this approach. IPP submits that fuel **manufactured** from feedstock which is approved by the Massachusetts Department of Environmental Protection (MADEP), which is of non-recyclable, zero mercury, low sulfur, low chlorine, and no heavy metal composition, and is also a paper, cellulose, rayon, or other related biomass material is 100% Eligible Biomass Fuel under the RPS.

Our fuel fits within the statutory framework of the RPS, and nothing in the statute or MADOER's regulations suggest that a fuel can be "broken down" into organic and "non-organic" components. We ask that the MADOER analyze this issue in the same manner as the non-organic components of construction and demolition (CD) wood, and also be mindful of the overall public policy goals of the RPS.

The statutory basis for the Commonwealth's RPS is the **Restructuring Act**, specifically **Section 11F of Chapter 25A**. The **Act** defines a "renewable energy generating source" to include "low emission, advanced *biomass* power conversion technologies, *such as gasification using* ***such*** *biomass fuels as... organic refuse-derived fuel.*" Chapter 25A, Section11F(b) (emphasis added). Nothing in the **Act** suggests that the list of fuels encompassed therein is meant to be exhaustive. While the Legislature failed to provide a statutory definition of what is meant by "biomass," the term is defined broadly as a matter of federal law. See Section 45 of the Internal Revenue Code (biomass defined as "any solid, non-hazardous cellulosic waste material which is segregated from other waste materials" ***not*** including "paper which is commonly recycled."); 42 USC Section 8802 (biomass defined as "any organic matter which is available on a renewable basis, including agricultural crops and agricultural wastes and residues, wood and wood wastes and residues, animal wastes, municipal wastes, and aquatic plants.").

There is no statutory basis for the MADOER to take what is clearly an organic-based biomass fuel, and deem the small portion of inseparable plastic/polymer material as non-biomass and thus "ineligible." ***The Act is clear in precluding "that the following technologies shall not be considered renewable energy supplies: coal, oil, natural gas except when used in fuel cells, and nuclear power."*** **Our fuel fits into none of these categories.**

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The intent was to prevent a plant from commingling, say wood and coal, and having MADOER consider the entire output to be renewable. Admittedly, our fuel contains small amounts of non-halogenated, non-sulfur group plastics and polymers that technology does not allow us to remove further. This fact does not allow the MADOER to parse out what is "eligible" and "ineligible," any more than CD wood can be segregated into organic wood and inorganic contaminants.

When the MADOER adopted the RPS, it provided a definition of "eligible biomass fuel" and limited the universe of qualifying fuel. Based on that definition, our fuel would be considered "organic refuse-derived fuel." Since adoption of that rule, the MADEP and MADOER have broadly defined the term "organic refuse-derived" to include "non-organic" components without attempting to quantify the portion that is "non-organic" and without deeming such percentage to be considered "ineligible" and thus subject to the co-firing provision of Section 14.05(3).

The eligibility of our fuel should be considered in the same manner that MADOER evaluated construction and demolition wood. As the MADOER is aware, that waste stream contains various "non-organic" components, and yet the MADOER has consistently viewed that fuel as "eligible biomass fuel." Specifically, on January 8, 2002, the MADEP concluded that the presence of "paints, stains, coatings or preservatives" in wood should not deem the fuels to become ineligible, and further concluded that such material was "organic refuse-derived fuel" without requiring further segregation or separation. The MADOER accepted this definition when adopting the regulations.

Since 2002, MADOER, in numerous advisory rulings, has broadly defined the term "organic refuse-derived fuel" without requiring that the fuel be segregated into "eligible and "ineligible" categories. For example, in the Schiller ruling, the Department's draft attempted to require that the organically derived fuel "be substantially devoid of contaminating elements such as paints, stains and construction debris to be eligible." That interpretation was rejected in the final draft, and the Department has, "post-Schiller", issued numerous rulings affirming a broad definition of organic refuse-derived fuel". See e.g., Boralex, Pine State Power, and Greenville rulings.

Perhaps the best example of the MADOER's broad approach to the term can be found in the Notice of Inquiry, which acknowledges the presence of "contaminants" in CD wood, but notes that the material is a "fuel of opportunity" that "must be disposed somehow" and can be obtained at "lower cost than other forms of biomass." While not law, the NOI illustrates the "common sense" approach to defining categories of eligible fuel; the same common sense that should be applied here.

Finally, considering our fuel as eligible under the RPS furthers stated and broadly agreed upon policy goals. It will encourage and enhance the generation of biomass-based power at a time when price and quantity of available whole tree chips is under extreme pressure due to increasing power prices and recently enacted federal production tax credits.

➢ Eligibility Criteria for "low-emission, advanced biomass power conversion technologies"

IPP supports measures which allow RPS Renewable Energy Credits (RECs) to be awarded to generation units which use or "co-fire" an **Eligible Biomass Fuel** to create new renewable generation and that meet emissions standards set by permitting authorities (as in Table 2, or as otherwise provided for plants regulated under 310 CMR 7.29) for the portion of electricity those plants generate with the Eligible Biomass Fuel.

Further, where an Eligible Biomass Fuel is co-fired or is a sole fuel source for a plant formerly creating energy using coal, oil, or natural gas, then the portion of energy created with the Eligible Biomass Fuel should be counted as New Renewable Generation.

➢ Special Provision for Any Fuel Fabricated from Both RPS-Eligible and Ineligible Feedstocks

IPP opposes the MADOER's method of assaying a heat rate assignment based on the current "Co-Firing with Ineligible Fuels Waiver" 225 CMR 14.05(3) in part as this section is derived from the portion of the Act (Chapter 25A) which states that the following are "technologies [that] shall not be considered renewable energy supplies: coal, oil, natural gas except when used in fuel cells, and nuclear power."

As we have previously argued, fuels manufactured from non-recyclable, biomass-based MADEP approved feedstock or that are "organic refuse-derived fuel that is collected and managed separately from municipal solid waste" and that are used in otherwise conforming renewable generation units are not otherwise identified in the Act as being subject to a contrived calculations for reducing the total heat rate based on whether other organics may be present, such as plastic or polymers.

We further would question the extent to which landfill gas fired units which currently receive RECs might not also be subject to similar scrutiny. We offer the following Document Summary from ASTM International as being indicative that there is some plastic/polymer based constituency in landfill gas.

> ***D5511-02 Standard Test Method for Determining ANAEROBIC BIODEGRADATION of Plastic Materials Under High-Solids ANAEROBIC-Digestion Conditions***
>
> ***1. Scope***
>
> 1.1 This test method covers the determination of the degree and rate of **ANAEROBIC BIODEGRADATION** of plastic materials in high-solids **ANAEROBIC** conditions. The test materials are exposed to a methanogenic inoculum derived from **ANAEROBIC** digesters operating only on pretreated household waste. The **ANAEROBIC** decomposition takes place under high-solids (more than 30 % total solids) and static non-mixed conditions.

1.2 This test method is designed to yield a percentage of conversion of carbon in the sample to carbon in the gaseous form under conditions found in high-solids **ANAEROBIC** digesters, treating municipal solid waste **(1, 2, 3, 4)**. This test method may also resemble some conditions in biologically active landfills where the gas generated is recovered and biogas production is even actively promoted, for example, by inoculation (codeposition of **ANAEROBIC** sewage sludge, **ANAEROBIC** leachate recirculation), moisture control in the landfill (leachate recirculation), and temperature control (short-term injection of oxygen, heating of recirculated leachate) **(5, 6, 7)**.

1.3 This test method is designed to be applicable to all plastic materials that are not inhibitory to the microorganisms present in **ANAEROBIC** digesters operating on household waste.

1.4 The values given in SI units are to be regarded as the standard.

1.5 This test method is equivalent to ISO DIS15985.

Ultimately, allowing manufactured fuels REC eligibility is a sound environmental and economic incentive for the Commonwealth. By increasing the available supply of Eligible Biomass Fuels, the MADOER is creating a more healthy competitive climate for those parties seeking to acquire fuel supply contracts as part of their financial due diligence toward new renewable generation.

By considering our fuel as eligible under the RPS, the MADOER furthers stated and broadly agreed upon policy goals. **It will encourage and enhance the new generation of biomass-based power necessary to meet RPS goals at a time when price and quantity of available whole tree chips is under extreme pressure** due to increasing power prices and recently enacted federal production tax credits.

In conclusion, IPP supports a broader effort by the MADOER to evaluate whether a "two-tier" REC award system may not be of value to the Commonwealth and its ratepayers as a means of improving both the rate that new renewable generation is created and also as a means to create a more secure market for existing renewable generation. This system could then also provide some incentive to existing fossil fuel fired generation to make use of eligible renewable fuels and receive credit for the new renewable generation created through avoidance of fossil fuel usage.

Thank you for your consideration of our comments.

Sincerely,

International Paper Products Corporation

Mark A. Dupuis, President